APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
NGUYEN, LOAN B

ART UNIT	PAPER NUMBER
2126	4

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary	Application No. 09/749,609	Applicant(s) MAZZA, SAM
	Examiner Loan B Nguyen	Art Unit 2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 December 2000</u> .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-10</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) <u>1-10</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-10 are presented for examination.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1-4, 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Schofield

(5860072) (hereinafter Schofield)

4.   As per claim 1, Schofield teaches a method comprising:

obtaining a plurality of attribute specifications, each of said attribute specifications

including an attribute name and an attribute type (e.g. col. 1 line 61; col. 2 line 1-12); and

generating a permutation of said plurality of attribute specifications (e.g. col. 2 line 13-

23; col.3 line 14-21).

5.   As per claim 2, Schofield teaches a method generating further comprises:

grouping said plurality of attribute specifications into type groups, each of said type

groups containing at least one attribute of same said attribute type (e.g. col. 9 line 43-53);

associating each of said type groups with a corresponding type size (e.g. col. 9 line 30-

38); and

sorting said type groups in an descending order based on the value of said corresponding

type size (e.g. col. 12 line 38-41).

6.   As per claim 3, Schofield teaches a method associating further comprises:

determining said corresponding type size for a type group (e.g. col. 11 line 14-27); and

assigning said corresponding type size to said type group (e.g. col. 12 line 65).

7.   As per claim 4, Schofield teaches a method determining includes:

obtaining said corresponding type size from a set of pre-defined primitive type

sizes if the attribute type of said type group is a primitive type (e.g. col. 12 line 65);

extracting a plurality of internal attribute specifications from said type group if

the attribute type of said type group is a non-primitive type, each of said internal attribute

specifications including an attribute name and an attribute type (e.g. col. 14 line 33-36); and

generating a permutation of said plurality of internal attribute specifications (e.g. col. 11

line 14-37); and

computing said corresponding type size of said type group by counting the total number

of bytes occupied by said permutation of said plurality of internal attribute specifications (e.g.

col. 12 line 42-45).

8.   As per claim 7, Schofield teaches a medium having information recorded thereon, such

that when said information is read and executed by a computer, the computer is caused to:

obtain a plurality of attribute specifications, each of said attribute specifications including

an attribute name and an attribute type (e.g. col. 14 line 33-36; col. 15 line 6-9); and

generate a permutation of said plurality of attribute specifications (e.g. col. 11 line 14-

37).

9.   As per claim 8, Schofield teaches that information recorded on said medium further

causes said computer to:

group said plurality of attribute specifications into type groups, each of said type groups

containing at least one attribute of same said attribute type (e.g. col. 9 line 43-53);

associate each of said type groups with a corresponding type size (e.g. col. 9 line 30-38);

and

sort said type groups in a descending order based on the value of said corresponding type

size (e.g. col. 12 line 38-41).

10.   As per claim 9, Schofield teaches that information recorded on said medium further

causes said computer to:

determine said corresponding type size for a type group (e.g. col. 11 line 14-27); and

assign said corresponding type size to said type group (e.g. col. 12 line 65).

11.   As per claim 10, Schofield teaches that information recorded on said medium further

causes said computer to:

obtain said corresponding type size from a set of pre-defined primitive type sizes if the

attribute type of said type group is a primitive type (e.g. col. 12 line 65);

extract a plurality of internal attribute specifications from said type group if the attribute

type of said type group is a non-primitive type, each of said internal attribute specifications

including an attribute name and an attribute type (e.g. col. 14 line 33-36); and

generate a permutation of said plurality of internal attribute specifications (e.g. col. 11

line 14-37); and

compute said corresponding type size of said type group by counting the total number of

bytes occupied by said permutation of said plurality of internal attribute specifications (e.g. col.

12 line 42-45).

Claim Rejections - 35 USC § 103

12.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13.   Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schofield

(5860072) (hereinafter Schofield) in view of Welling et al (hereinafter Welling et al).

14.   As per claim 5, Schofield does not specifically show a set of pre-defined primitive type

sizes includes the type size definition of C++. Welling teaches the mapping data type between

IDL and C++ programming language (Customizing IDL Mapping and ORB Protocols, page 397-

398). It would have been obvious to one of ordinary skill in the art at the time the invention was

made to combine Schofield with Welling because it would provide for the mapping process from

IDL to C++ programming language or vice versa; also this process is automated in an IDL

compiler that generated its interface.

15.   Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schofield

(5860072) (hereinafter Schofield) in view of Juric et al (hereinafter Juric et al).

16.   As per claim 6, Schofield does not specifically show a set of pre-defined primitive type

sizes includes the type size definition of Java. Juric teaches the data type mapping between the

primitive type in Java programming language and CORBA IDL. (Java2 Distributed Object

Middleware Performance Analysis and Optimization, page 31-33). It would have been obvious

to one of ordinary skill in the art at the time the invention was made to combine Schofield with

Juric because it would provide for a consistent data type mapping between Java and CORBA

IDL and the measurements have been accomplished on identical equipment in an identical

environment.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fontana et al. (5848273) teaches a method extends C++ programming language binding data a cross networks, and a schema that is provided mapping data type to be used by the IDL defined interfaces.

Schofield (6308255) teaches a method of generating a data structure that contains information about IDL defined interfaces and their related operation for C++ class objects.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Loan B Nguyen whose telephone number is (703)305-0358. The examiner can normally be reached on 8:00AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone numbers for the organization where this application or proceeding is assigned are (703)306-5404 for regular communications and (703)306-5404 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Loan B. Nguyen
August 8, 2003

JOHN FOLLANSBEE
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